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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,510	06/01/2006	Masayuki Kimata	19905	8429
23389 7590 11/16/2007 SCULLY SCOTT MURPHY & PRESSER, PC 400 GARDEN CITY PLAZA SUITE 300 GARDEN CITY, NY 11530			EXAMINER NGUYEN, NGA X	
			ART UNIT 3662	PAPER NUMBER
			MAIL DATE 11/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/581,510	Applicant(s) KIMATA, MASAYUKI	
	Examiner NGA X. NGUYEN	Art Unit 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>06/01/06</u> . | 6) <input type="checkbox"/> Other: ____. |

Drawings Objection

1. Figures 1-3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2-3 & 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Based on the specification, a finger claimed in claim 3 is a signal processing to find out a maximum reception signal. Therefore claim 2 & 3 and 7 & 8 are duplicated.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1-3 & 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshiaki (JP11266228) in the applicant's background section in view of Hamada (2001/0020917) and further in view of Yoshida (7215699).

Yoshiaki discloses:

- A searcher for generating delay profiles for respective preset beams using the reception signals, detecting path timings of a plurality of multi-paths from the generated delay profiles for the respective beams and outputting the detected path timings and beam numbers with respect to which the path timing is detected (see page 1, paragraph 7).
- A reception multi-beam controller for outputting reception antenna weights corresponding to the beam numbers indicated from the searcher is a well known which shown on the applicant's background art (see page 1, paragraph 10).
- A plurality of signal processing means for measuring and outputting reception signal power levels of the signals obtained by weighting and combining the reception signals which have been delayed by a given time based on the path timings set by the searcher, using the reception antenna weights indicated from the reception multi-beam controller is (see page 1, paragraph 11-12).
- A transmission beam former for weighting and combining the transmission signals using the transmission antenna weights generated by the transmission antenna weight generator (see page 1, paragraph 18).

Hamada discloses:

- A transmission antenna weight generation for detecting a maximum reception signal power level from the reception signal power levels output from the plurality of signal processing and if the same path timing as the path timing set in a 1st signal processing in which the maximum reception signal power level is obtained is set in another signal processing (see page 7-8, paragraph 112-114).

Yoshida discloses:

- Generating transmission antenna weights used for the transmission signals based on the reception power level of the 1st signal processing, the reception power level of the 2nd signal processing in which the same path timing as the path timing set in the 1st signal processing is set, and reception antenna weights set in the 1st and 2nd signal processing (see 6-8, lines 43-47).

It would have been obvious to modify Yoshiaki by incorporating the teaching of Hamada and Yoshida's devices detecting and generating a maximum reception signal power level from the reception signal so as controlling the directivities of the downlink transmission signals transmitted from the antenna based on the received signal.

With regard to claim 4 & 9, Hamada teaches the generating transmission antenna weights using the angle of direction of a preset beam corresponding to the beam number, the number of linearly aligned element of the plurality of antennas and the distance between the elements (see page 3, paragraph 41-45).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGA X. NGUYEN whose telephone number is 571-272-5217. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TARCZA H. THOMAS can be reached on (571) 272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NGA X NGUYEN
Examiner
Art Unit 3662

NXN



THOMAS H. TARCZA
SUPERVISORY PATENT EXAMINER
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